Title (en)

ROBUST TELEMETRY REPEATER NETWORK SYSTEM AND METHOD

Title (de)

REPEATER-NETZWERKSYSTEM UND -VERFAHREN MIT ROBUSTER TELEMETRIE

Title (fr)

SYSTÈME ET PROCÉDÉ DE RÉSEAU ROBUSTE DE RÉPÉTEURS DE TÉLÉMÉTRIE

Publication

EP 2972515 A4 20170322 (EN)

Application

EP 14764197 A 20140317

Priority

- US 201361799588 P 20130315
- US 2014030831 W 20140317

Abstract (en)

[origin: US2014269188A1] A robust network telemetry repeater system exploits the repeater structure of data propagation and transmission and reception bi-directionality to increase network robustness. For example, multiple perceived receive attempts are created with no additional overhead. The system can be configured whereby nodes “hear” the transmissions of both adjacent and non-adjacent nodes forming implicit acknowledgement (“Acks”), and originating nodes can retransmit until implicit acknowledgments (“Acks”) are “heard,” indicating a successful link relay. Implicit acknowledgment can be applied to bidirectional networks, and bidirectional action can enable all nodes in the network to know the status of all other nodes.

IPC 8 full level

E21B 47/12 (2012.01); **H04W 88/04** (2009.01)

CPC (source: EP US)

E21B 47/12 (2013.01 - EP US); **H04L 1/1657** (2013.01 - EP US); **H04L 43/08** (2013.01 - EP US); H04L 43/0817 (2013.01 - EP US); H04L 43/0835 (2013.01 - EP US); H04L 43/0852 (2013.01 - EP US); Y04S 40/00 (2013.01 - EP US)

Citation (search report)

- [A] GB 2423893 A 20060906 - ITT MFG ENTERPRISES INC [US]
- [Y] US 8115651 B2 20120214 - CAMWELL PAUL L [CA], et al
- [Y] US 2012274477 A1 20121101 - PRAMMER MANFRED G [US]
- [Y] EP 1978670 A2 20081008 - ITT MFG ENTERPRISES INC [US]
- [A] WO 2009053954 A1 20090430 - UNIV COLLEGE CORK NAT UNIV IE [IE], et al
- [Y] US 2012243454 A1 20120927 - HWANG HYO SUN [KR], et al
- See also references of WO 2014145969A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 10103846 B2 20181016; **US 2014269188 A1 20140918**; BR 112015023778 A2 20170822; CA 2906215 A1 20140918; CA 2906215 C 20210119; EP 2972515 A1 20160120; EP 2972515 A4 20170322; EP 2972515 B1 20181205; US 10673571 B2 20200602; US 11095399 B2 20210817; US 2019052410 A1 20190214; US 2020259593 A1 20200813; WO 2014145969 A1 20140918; WO 2014145969 A4 20150219

DOCDB simple family (application)

US 201414217160 A 20140317; BR 112015023778 A 20140317; CA 2906215 A 20140317; EP 14764197 A 20140317; US 2014030831 W 20140317; US 201816161955 A 20181016; US 202016862843 A 20200430